All Agency Project Request

2013 - 2015 Biennium

Agency Institution Building No. Building Name

University of Wisconsin Madison 285-0A-0038 NIELSEN TENNIS STADIUM

Project No. 15J2F Project Title Nielsen Tennis Stadium Roof Area 1 Replacement

Project Intent

This project provides investigation and research, pre-design, and design services to replace roof coverings and complete all other associated ancillary work to maintain the building envelope integrity and prevent damage to the building and its contents. The roofing system and building exterior envelope will be evaluated to identify deficiencies, develop design solution alternatives, and recommend appropriate corrective measures.

Project Description

Project work includes removing ~18,192SF existing PVC roof, insulation and decking; and installing a new 60-mil Ethylene Propylene Diene Monomer (EPDM) membrane over new insulation to achieve a minimum average R-24 value. Roofing work must be coordinated around electrical conduits run across the roofing surface, mechanical equipment curbs, and other roof penetrations and protrusions. Conducting an infrared or nuclear scan of project areas should be considered to determine presence of wet insulation and/or damaged areas. Anticipated work detail is outlined below.

- Raise approximately four (4) ducted HVAC louvers and approximately twenty-four (24) sleeved exhaust fan assemblies to achieve eight-inch (8") minimum roof membrane flashing height.
- Modify all existing metal panel-to-roof curb heights to achieve eight-inch (8") minimum roof membrane flashing height.
- Install new wood blocking at stone-coping at front of building to receive new sheet metal coping to achieve eightinch (8") minimum roof membrane flashing height.
- Remove all existing roofing components, including existing perlite insulation, down to cementitious wood fiber deck.
 - · Extend all soil stacks 8" above finished roof surface as necessary.
- Prime existing cementitious wood fiber deck with manufacturer's required primer. Install new manufacturer's self-adhered vapor retarder to prepared substrate.
- Install one (1) layer of 2.5" thickness polyisocyanurate insulation adhered to the prepared vapor retarder using the manufacturer's approved insulation adhesive. Install one layer (1) of 2" thickness insulation to the previous layer of insulation using manufacturer's approved insulation adhesive.
- Install 4' x 4' tapered drain sumps. Stagger all joints and seams from the base insulation layer. Installed tapered insulation saddles as necessary to prevent water from ponding in excess of 72-hours.
 - Install new 60-mil fully-adhered EPDM membrane and flashings per manufacturer's requirements.
- Flash roofing penetrations per manufacturer's recommendations. Use pre-fabricated pipe boots, field wrap penetrations wherever possible.
 - · Install new sheet metal components, including new sheet metal coping at front parapet.

Project Justification

The roof sections are more than 24 years old. Recent site inspections by the Physical Plant staff and Division of Facilities Development staff determined these roof sections require replacement to address current leaking, weathered, worn, and/or damaged sections. These repairs will extend the life of the roof sections and prevent moisture from penetrating the building envelope.

All Agency Project Request

2013 - 2015 Biennium						
A/E Consultant Requirements				✓ A/E Selection Required? <u>Cor</u>	nmissioning	
Consultants should have specific expertise and exproofing systems, exterior building envelope renove within institutional environments as part of a design roofing conditions, site surveys, acquiring field da accurate development of design and bidding docuproduction of necessary design and bidding docuprojects from past experience (including size, cost interest and when known, include proposed consu			ilding envelope rer ments as part of a d eys, acquiring field sign and bidding do gn and bidding do be (including size, o	novation/restoration, and masonry construction lesign team. Work includes report of existing d data, and verifying as-built conditions to assure ocuments, drafting roof plans and details, and cuments. Consultants should indicate specific cost, and completion date) in their letter of	Level 1 Level 2	
1 1 t	modifications as rec ore-design documer	uired to t to esta	complete the spec blish an appropriat	dule, and budget estimates, and recommend sified project intent. The consultant will prepare a te project scope, budget, and schedule prior to to the Board of Regents and State Building		
Pro	ject Budget			FundingSource(s)	<u>Total</u>	
Cc	A/E Sel	n Start: oletion:	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	GFSB - Facilities Maintenance & Renovation [Z060] PRSB - [] Agency/Institution Cash [AGF0] Gifts Grants Building Trust Funds [BTF] Other Funding Source Project Contact Contact Name: Chris Velie	\$0 \$0 \$14,500 \$0 \$14,500 \$0 \$29,000	
<u>Proj</u>	ect Scope Consider Will the building of	deration	n Checklist The properties of	oject be occupied during construction? If yes, explain how	y N the ☑ □	
	occupants will be All project work with operations and acti	ll be coor	_	nstruction. mpus physical plant staff to minimize disruptions to daily		
2.	Is the project an e	xtension	of another autho	orized project? If so, provide the project #		
3.	Required hazardoi	ısmateri	als abatement has b	nat materials are involved and how will they be handled? een included in the estimated project schedule and project budg	▽ □	
	Comprehensive bui	ldıng sui	vey inventory data	is not available on Wisconsin's Asbestos & Lead Management		

All Agency Project Request

2013 - 2015 Biennium

	System (WALMS) http://walms.doa.state.wi.us/ .	
4.	Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent?	
5.	Will the project impact the heating plant, primary electrical system, or utility capacities supplying the building? If yes, to what extent?	
6.	Are other projects or work occurring within this project's work area? If yes, provide the project # and/or description of the other work in the project scope.	
7.	Have you identified the WEPA designation of the projectType I, Type II, or Type III?	✓ □
	Type III.	
8.	Is the facility listed on a historic register (federal or state), or is the facility listed by the Wisconsin Historical Society as a building of potential historic significance? If yes, describe here.	
9.	Are there any other issues affecting the cost or status of this project?	
10.	Will the construction work be limited to a particular season or window of opportunity? If yes, explain the limitations and provide proposed solution.	✓
	$Project work is seasonal. \ Preferred project work schedule should be limited to late spring, summer, and/or early fallmonths if possible.$	
11.	Will the project improve, decrease, or increase the function and costs of facilities operational and maintenance budget and the work load? If yes, to what extent?	
12.	Are there known code or health and safety concerns? If yes, identify and indicate if the correction or compliance measure was included in the budget estimate, or indicate plans for correcting the issue(s).	
13.	Are there potential energy or water usages reduction grants, rebates, or incentives for which the project may qualify (i.e. Focus on Energy http://www.focusonenergy.com or the local utility provider)? If yes, describe here.	
14.	If this is an energy project, indicate and describe the simple payback on state funding sources in years and the expected energy reduction here.	